Notebook Series -- Pocket Notebooks
Notebook, PN-16-04-19

The dated entries in this pocket notebook cover the period March-September 1916. Some of the entries were made at Edison's winter home in Fort Myers, Florida. The book was used to record ideas about business matters, experiments to be tried, and other tasks to be performed. Some of the items have been crossed out and marked "Ent." Many of the experimental notes relate to disc record production. Included are entries pertaining to wear testing of various disc record compositions, varnishes, baking schedules, and presses. Some of the notes on disc composition were entered into N-16-05-10 (Notebooks by Edison and Other Experimenters—Disc Record Book #13). Also included are notes on battery regeneration and on military topics such as airplane wings and guns, along with a series of fifteen "questions to ask Admiral [Joseph] Strauss."

The business-related entries include a list of the number of violin players and other musicians employed by Edison, lists of material needed to produce record blanks, and notes about production contracts and loans. There are also notes regarding tone tests and recitals. At the end of the book is a notation concerning Edison's agreement of July 22, 1915, with H. H. Meno Kammerhoff, supervisor of operations at the chemical plants in Silver Lake, New Jersey. Other Edison employees mentioned in the book are Charles T. Dally, William W. Dinwiddie, Archiebald D. Hoffman, and Sherwood T. (Sam) Moore, principal assistants in the development of disc records; purchasing agent Archibald C. Emery; Allan M. Hird, manager of the Disc Record Manufacturing Division; and machinist and longtime Edison associate Frederick P. Ott. The pages are unnumbered. Approximately 150 pages have been used.

Mr. Murray to find out [illegible]
also arrange the landscape
10 other [illegible] per [illegible]

3—3—16

14200 Records looked

Run Outs	1801 gone
Crocked	1035 gone
Knocks	[illegible] gone
Bad centers	[illegible] gone
Liver spots	391 gone
[illegible]	[illegible] gone
Mixed [illegible]	191
Holes.	175 gone
Chipped Edge	108
Scratched	113
Rough surface	174
Poor Bind	154
Crackles	56
Hairlines	[illegible] gone
Bad labels	34
[illegible]	47
[illegible]	[illegible]

Maxwell's ~~Lecture~~ Records

Get photo large of Hydrographic "Hydroscope"

Sunday ~~8 PM~~ test record

Ventnor Floor 2 [illegible]

Simpson ~~[illegible]~~ Scheme

Buchanan ~~Test~~ record [illegible]

~~Show Mr [illegible]~~ photo with photo ~~[illegible]~~

Arrange for ~~[illegible]~~ showing [illegible] one model.

Show Waterman & Rice their Mould holders bad work.

Questions to ask Admiral Stream

1 = is the straight taper at end of gun [illegible] what becomes of rotation when in straight + what about strain on band.

2 Why is mechanical work done so quickly on projectile is there any reason The taper could not be twice the length of the bearing part of the projectile before rifling starts + then rifling is straight or slight taper for 2 lengths more + then starts more rapidly to first part of taper being calculated for inertia of projectile, this would remove a distortion gun bore recoiling away from zone of greatest Erosion

3 Has the ~~[illegible]~~ absence of a ~~[illegible]~~ friction been taken care of

(12) longitudinal waves same as was here in ½" glass rods being broken by a friction pad into hundreds of pieces

Also vibration due to rotation of projectile making these cross-sections producing cracks

4 Would there be objections to an artificial silk bag of acetylcellulose loaded with rods to burn at

Animal silk Carbon is very exciting

5 Is there objection making rest part of projectile rest part to burn Cordite

8 Is there any reason which of powders ignited in flame at once by black powder, consident at propagation by flame of powder itself

9 = In the act of ~~[illegible]~~ detonation doesn't Whirls of pressures distort the powder chunks before actually consumed

10 Would there be objection to a lead bag for least powder being nearest projectile to delay ignition

11 = Is it certain that the black powder doesn't force modules to deform them before they are consumed or does the pressure equalize uniformly around each module

12 Are no duclas put in promiscuously in bag

13 = Don't the muzzle ever blow the waves at and give gas a chance should think bell would be made like phone funnel to Champer

14 –

Magnetic Loop rel recorder
Copper plated gun cotton nodules
15 Burning out fan blades dry wheat
Cloth under stopped it –

steel sprinkler pelled equipped ox in gun powder

to stop drip of gun pect electric
wire lagged under whole length
gum + wheat tape to expand up

WC O'Hara
Telephon 2905
Columbus

Get some Balsa wood from
Porto Rica ½ the weight of
Cork life preservers men use it
Also Missouri Cork wood
50% heavier than Cork

1= Drop Vicat needle blunt on blank
face & edge to determine hardness

3= Phenolate of Ammonia used
in Veneer instead Phenol to
bring to 22% – ditto Methylphenolate
+ Naphthalene – ditto Naphthalenonly

Shoot Zeppelins –

Cannon

deforming solid amalgam

Big powder chamber

Bags for powder lead felt & cloth.

Use easily decomposable
ammonia salts which when
heated & in vacuum will
decompose & distribute the
finely divided metals thru
the vacuum.

Try pressing ammonia to
saturation then varnish –

Try more 6/4 to stop wrinkles

Try Rolling a transfer plate
Even before going to oven

Constable why not take
Warner in your Dept
he is going cold now

Heul Elec Starter
6 lead batteries Weight 63 lbs
Motor 46 – Cold weather
Starts 10 V 250 amp –

Wesol D p-phenylenediamin Hydrochloride
Wesol P p-Amidophenol
Wesol DD Diamidodiphenylamine
Colors produced by Oxidation of these on
fibre by H_2O_2 Brickbrown or
Quinone Discovered in

1888 Eng Pat 2525 German Pat
47349 51073 80814
French 195492 205259
No American Pat Two depend need
them badly

Big Dept Store Pittsburgh Dec/15
Average price received for 1 Edison 1/16
Victor 61.

Marvellous sensitive test for
potash Subnitrate Bismuth +
Hyposulfite Soda –
Wickes Bi K Hyposulfite precipitate –
Experiment on this in battery

Following men work at works

Violin players	20
Cello	—
Viola	1
Clarionette	7
Flute	8
Trombone	4
Cornet	7
Bass Bandin Trombone	1
Baritone Horn	5
Drums	3
Mandolin	5
Guitar	3
Piano	6 – 3 by Ear
Snare Drum	1 Ear
Piccolo	1

Binny Smith & Co 81-83 Fulton
hand of Cobalt Spirit 12% Cobalt
7@8% Ni of 55¢ per tan Carload
lots for less than Car of 60.
less fut to Orange.

Make Plaster Paring
blanks – dry & then
soak in Shellac Var
Condensite Var –
glue Wally Casein
Treat formaldehyde
dry & then Urea

Lay the [illegible] & blank
in direction of the Mucus

Ask Mitchell about
Hypopulfite Cell –

Try regenerating old iron plate by reversing low rate electricity & then soaking in Hypochlorite Na — to further oxidize iron. Break up the dense Hg iron —

Put new straight groove pressplate & also aeroplane wing alcohol.

Get some hard lead plates. flow 116 E Van Baker transfer mag —

Haggum give me all the Diphenal you can —

Higham Salary.

Get in touch with the shaking acrem people closed down

Look records in Melted Vesalin Myol & Melted paraffin also in Mineral Oil for some time —

Get ~~[illegible]~~ for Crays

Aeroplane Men

Split

Try phenol alone with say 3 6/4 to 6 phenol on reg safe schedule [illegible] several proportions 6/4 see what it really does —

See very hafiz cars at Sydney — Ale Meadoff T Rogers

Evening Tuts Mfrs Cabinet present prices

#100	14
150	20
200	24
250	28

Tob Oranges

C P Resin + Absolute
Alcohol dip procession

Chloride Calcium
to keep water in -

Chl Zinc

Chl Fe ic

Test wear after printing the
Veneer Reg + 387 E - also listen to surface
After that use 1 each

Cut Veneer thus to relieve
strains - Calliper dwh
Then this way
a a to dwh

Transfer the 3 Prod plates -
afterwards put some
387 E Varnish on + see
if Edge Cracks

Luhr turn down 6 iron
plates to 3/16 after you
have a dozen 1/4 inch -

Moore press iron plate
Varnish 250 pressure but only 200° Fah
another iron mould
See if it still adheres to
original plate, if so -
Transfer + print on 1412
perhaps instead turning
Can press them flat,

Fred Off = Req Var flow + rotate
pins

Bird Cage for 3/16 iron

Moore wash cast iron
plate req wash

Haffman Monday make up
387 E Var for 1001 Transfers -

Look up desirability of making Cast iron plates more than 10 1/4 say 10 5/16 inch to get rid of the low edge.

Take Cast iron plate 60 cc Req Var or better 387 Var use another Cast iron plate & put on 2000 lbs press see how much squirts out if it comes off on one or the other transfer to a blank at 250 & print -

Cook some Req & 387 Var at 135° for 1/2 hour & see if bubs arise then Cool & flow several plates Bake & see if bubbles - Note rise of Viscosity

Moore Try 6/1/12 dishing Experts with the other Glycerin Var 4% - also 6% where 1/2 para used -

Wilson = I no longer get any reports of Waquin sales, or our own films, or how Paramount deal is coming on

get some 387-8-9 Transfers burn them off - & print, Warm

1 = Get pattern or stove plate iron disk for Bergman

2 = get large School Slate to Cut disc from -

3 = Send to Moffitt Jaquin for clean piece Magnesium Lumin to Cut Disc from -

4= Try [illegible] shoes
Narrow glass [illegible] glass
Connecting [illegible] factory
Crows
Slab Asbestos [illegible] after –
dec of 120H. all [illegible] any
of these –

5 Put away for time test 10
year time repeated recorrals to
all of Time Changes the cracks

6 = Flow on ½ plate dry 2 hours &
turn flat with Saphyre ball or
burnisher so as not break the
skin – possibly no alcohol but
liquid [illegible] or Kerosene – Cement kaur in
colonies wet with Kerosene
if breaks dry 3 hours or heat 2
hours 130 or 120 & longer [illegible]

7 = 6 sheets or discs of black iron
ground together by a proper
Cement.

8= flow 2 plates Dry 3 hours
put transfer 1412 blank into
between put in Oven & bake
Regular. if shows any signs
Dry longer. Can even heat to
130 for 2 hours –

9= Even crooked plates could
be flowed & baked 2 hours 130
a follower could make the same
Mechanic Varn.

Moore we tested 12 of 4486
where are the record of the
balance of the [illegible] 173 that
was to be [illegible] on recp
Music Mould –

prevent chipping of Vice
by fixed point [illegible]
at a dozen points – 1 [illegible]
with [illegible]

J V Miller, ~~[illegible]~~ a little [illegible]
Silver, palladium, arsenic, gold
in the [illegible] after [illegible] then [illegible] produce
a least overvoltage on chgs & [illegible]
also action Cold Think Fe may
stand Cold better.

Overvoltage

x platinum great [illegible] at + [illegible] overvoltage of Fe [illegible].

Hayes go + listen to some of Pathe Records of same tunes instrumental also Voices etc have + see if they are Duplicates from our Records —

Take Lac 1412 grind up + treat with Soda sec. of [illegible] pulp + Lac + Resin — Keep some near on it.

Patch a Cracked Var plate + [illegible] again or over.

Inspect Lac 1412 blanks for bad or Cr'd Edges

Get some reg Var plates heat on Steam plate + try make friction Cracks —

See if blank records are flat,

See Joone plates record
get Gudeiss in making
Bread spots -

get the Thermometer
fixture for presses

get Talbaque at making
the thermometers

See about Mould
holders & other things
now being made &
also cast iron orders
they have

See the Case hardened
plates,

Punch out & form plates
of heavy tin — also
of thin steel —

See Hoffman about
Varnish —

Dunwoodie about
filtering our Varnish

See Hoffman about filling
para - poison etc

Dunwoodie get Expansion
& Contraction of 1412
blank & a punch —
up to 330 — down to
400 —

Arrange Hoffman tech
his Ream Weekend by
making 200 plates —
Transfer + print —

Kennedy try a
Reg Recorder on
big furnace

Try a telescope —

Mason What you
doing with Dwerdule
Chemist —

Moore Assemble
300 Hornbeks
+ then Disassemble a
note Cracks —

Tell Mason + Kennedy off
lookout Mels Cake
don't not want as Sky
will begin away

Reprint 17 times
24 new Records
Suspect Each
Schedule 200 then
100 lbs 1 min
press 2 min —

Fix up between floors & Hoffman new bldg

dissolve some veneer from baked plate by Soda - then Reprecipitate & see if it will dissolve — a

Meister about accommodation —

Calliper Record
Mould Holders
see if they didn't out.

Melt Sandarac
" Para
" Resin —
Make Some Var & see if Bubbles

Write with KOH, then treat with acid, also alcohol also after acid by alcohol

Test Vital device on Hydrocarbon —

Venus - get rid of part assembly tools for all machines & have bench room allotted — in drawing —

Hurry up Japanning
decals & clutches

See if Reis & John moore
right in — go & see if

go with Charles see
Bldg's —

See Recovery Phenol
Redistillation —

Maxwell only use
1412 for Demonstrator
& Some tools —

Ask Bachman what reason
Stokes gives for raising
price of Rubber

Lott about testing
Chalk —

Have Hoffman Recovered
Phenol sample —

Emery Inquire around
for other makers of
Chalk —

See if Hoffman has plenty
Chalk —

Req Imprd Calipers of
1412 Clerks —

Hoffman Send 5 gals Reg Var
no para to fla + 10 Var
plates —

Buy Tank for fla —

Buchman McCabe
Smith — Way of
letting from of Return
Bells to see Dunning
to Change Train —

also put 60 bells together
& test —

Take 5 lbs good Resin
50 1¼ Lotch plates
Some Para & ½ lb all
the Resin + wax
gal Formaldehyde
2 lbs 4¼ —

½ doz Reg plates —
a Wicker + plain cover
2 Thermometers —
5 lbs white phenol —

Scott to see Chas E +
Constable about approving
of cant & gave send to me —

Calculate 38 Cents for Resin
+ 5½ C Soda + 4 dec lochals
Acetate Cost Price now
13½ cents

Get Check book — +
$50.

L Ott, keep up chalk
supply.

Every Fed other Chalk
makers —

Tell Meadowcroft list of what I want sent

Mellors put on Time
last 48 Low Bake
& 48 Low Low bake

Dip sheet now
Shapes in Condensite
Van & Bake —

Carbonyx in charcoal
some Condensite Var
baked 250 – see how
much of chunks –
for Eucphone

to get all the Benzol off
from Sulfonating Chlore
the sulfo tube & connect
a Condensing Coil & raise
B.P. above Benzol —

Chlorides at ord temp give
Hypochlorite but at higher
temp Chlorate.

It may be a battery we orks by
Chloride in KOH & dont
Chge well but Try Experiment
with 2½ @ 3% KOH Cold
& also hot It may be
Bismuth Chl used
in cause of Bi working
so well —

Try if fluoded feldspar
decomp by boiling sol
Mg oxide or MgCl

Merchant get Sample
Na_2CO_3 from Carbonating
see if [illegible] can
sell it —

Did it affirm success
in selling the Crude
Acid —

In Experiments at Myers
Try Hydrochloride of Para

Also without Para find a
schedule

Also Free NH4 —
in Var — to see if bubbles

Try great excess warm
& Resins —

Try one plate Covered
over the other —

See if Sandrac loses weight
delle para after 220° Fahr
up to 330° Fahr

To Each 265 grms of Var
add 1 grm Para & 7.9 grms
6/4 — This makes standard
Var —

~~Wide moon to have a new Var~~

Think our best way is a
double flow of 3 hours
~~Best after~~ 1st flow &
2 hours after 2nd
use thinner Var (10)
more Al so it will flow
OK using 2½ Co
equivalent.

Pass Formaldehyde into
Alcohol — Gr.

Also into the Varnish
& heat acc of Latter
pl rec 6/4 —

When get Resin.
Use part of alcohol
& dilute Formaldehyde
instead 6/4 —

Put 20 cc or even 10 cc
on plates & take
to 210 then of Low even
then 25 @ 30 cc
& Bake again.

Amylic Ether
BP 180° Centg —

Anisic alcohol — Crystals
MP 23° Cent — BPoints 250°
H2SO4 Converted to Resin —
ZnCl converts to hard transparent
mass MP 100 cent mixed alcohol
or water —

Telegram Measurement of
Glass Cash Contract
Closed

Put

Take sample of our phenol ~~not~~ double distilled and boiled see if all phenol's fallen off - Neutralize with CO_2 & redistill see how close to MP can get —

Think the added phenol to our resin should be extra pure

Try make Resin from proper CO_2 phenol if good - redistill - & try for cooking

See how much sulfur & other things in our best batch of - use plenty acid & lots & see how much black get out,

Make a very heavy funnel same size as now used in Otto room to get it louder when close to - think some of volume lost

When get north try campaign of taking out fractions at 180 @175 to stop cracks Also double pour to get rid bubbles & subsequent knocks

possibly reason Moore is getting results low % of 141% of Cake because therefore is low fat. The ones we tried were all high fat.

Our oven cannot possibly condense all the plates alike & I think of Campaign & should stand to get even heat. The fans outside heating the air & the air blown into oven getting radiation & get even temp.

THIS IS VERY Important.

All aldehydes combine with acid sulfites by formaldehyde & use in place of 6/4

Add 10% wood alcohol + 3% Para to Van fat dont fire quick add an oxidizing agent such as a mild acid to turn methyl alcohol into formaldehyde

Aldehyde combines with ammonia to form aldehyde-ammonia by heating turn into amorphous bodies (Basic)

A resin is formed when cyanamide acts on acetic aldehyde by formaldehyde also

Should try make Condensate from Aniline. Then add HCl & dissolve out aniline & get a pure Resin — Then add what is necessary.
Aniline was cheaper than phenol.

Report from Baykin some Concentrated Formaldehyde in Alcohol —
This dissolves phenol in it & make a Varnish & Cures at 160°F —

Also use Alcoholic Formal instead 6/4 —

Dinaphthyl & Resorcinol — This will Certainly Condense made by action of HCl Wang & Lucidol on Fungal

just Coulad may not be Enough to flatten the Varnish plate hence Cooked Condensate —
Better make series Experiments to find how much more pressure is necessary —

put bal of 1417 test dark Cir with Kraft over overno, for 10 days at 2 weekly Dose of Cir

Costs MgO

$MgCl_2$ at 35cts ton	Mgd Cost	4.125 cts
MgO 92% at 100cts ton		5.43 "
Epsom Salts 60cts ton		18.2 "
$MgSO_4$ $60. ton f.o.b.		7.5 "
[illegible] 95% $65 ton		8.1 "

It may be in sulfonating we do not convert all the Benzol –

We could blow hot air thru & condense the Benzol – or perhaps raise the heat & distill it over or perhaps close the settling tank & blow air the Benzol –

Possibly no water kept in reflux pipe of sulfonator, if so big loss

Grate Daily Mass

Think we should put cooling jacket around tanks where white Bazmidetonate of Mg settles out

Thought may be close the Centrifugals & blow air thru to remove large amount H_2O & HCl before going to dryer

See what 1/8 steel stock very low Carbon sheet can be got in stretched – for Vat plates Wrote Charles E.

Benzinesulfonate of Soda distilled in an iron retort gives Thiophenol if done in Copper retort subject a furnace -
Eventually we get some
BP 172.5
Vapor attacks Eyes
has alliaceous or aromatic
Odor
Combines with Hg & to form Thiophenol
C_6H_5-SH -

Phenyl Sulphide also obtained by dry distillation of
Benzenesulfonate Soda
$(C_6H_5)_2S$
BP 272.5

Phenyl disulphide
$(C_6H_5)_2S_2$
BP 310

Resorcinol Ether is a Resin

Resorcin $C_6H_4(OH)_2$

Chlorine acts violently on Acetone to form Resinous products

Conclusion I came to on
Experiments with Smooth Discs -
Para makes uneven plates the more
used the more uniform -

Moral - To cure bubbles diminish
free phenol if you still have
bubbles increase the Para &,
slow down the distillation between
140 & 165°

Generally loss of plates was
due to bubbles almost
entirely -
8 6/4 Blubs increase with addition
of free phenol 2-9-11-18
Para decreases bubbles

With 6/4 increase of phenol
increases bubbles
With increase of para bubbles
diminish This is equivalent to
diminishing the free phenol

Monochlorethylene or
Vinyl Chloride
C_2H_3Cl. is a gas
when exposed to sunlight
it converted into a
viscous amorphous
insoluble mass.

Dichlorethylene (liquid) $CH_2 = CCl_2$
it passes quickly into a
polymeric modification
amorphous insoluble in
ordinary solvents

All aldehydes condense
with acid sulphites
which decomp rather
easy at ~~100~~ 140° C and
perhaps then better
than 6/4 as gas
mixtures

An aqueous sol of Aldehyde Ammonia on standing rapidly on heating alters & gives a number of bases called Aldines, or aldehydobases. These bodies are amorphous

Oxalic aldehyde from it Glycosin made which has same constitution as Hexamethylamine.

Glyoxylic acid has all the properties of an Aldehyde —

See of press platform Calliper same thickness all sides —

It may be veneer is softest at 180 @ 200 + will expand best without cracking & that after its condensed may not stretch so much

Mason-Wash then sulfite fetter Cooke with waste from the Benzolator — This will take phenol out, & could return the wash liquor to Carbonator + save the phenol — wrote See if heated at

Discarp Not Cold -
Very Cold to get high
water hydrate as if
thinks boiling under
Excess Water makes a
lower hydrate & its
not so good -

Try Hydrated Sulphide
Ni in tubes

Calliper Van plates
also see if round
Edge on plate &
holder is the
same.

Nitroaniline & formaldehyde
makes Varnish -
Try -

Iron grid loses carbonity
by getting dense Iron
action of Mercury
Submerge in KaOH or
in Nitrogen or Hydrogen
the iron grid collar
washing to distill
off the Hg -

Test for Sulfonations
Use 500cc + distill over
army press Benzol use
Vac to keep temp down
see if Dolly & Mason
tried it -

4-19/16

file patent for
KCl from Hagan
& NaCl fusion
absorb Valdez KCl
by Water opening
till heavily
Concentrated —

32 Records at Keyes
64 Quinfoam
Feed line cracks 2 OK
" " 5 Bad
Big Wrinkles 7
Numbers turned up 7

Cracking Experiment -
12 first points test
12 2nd "
12 3rd "
12 4th test -
Knife test 1

After we have seen plates or knife test crack then make Run of 60cc 80cc piece of crack - this will prove if condensate next plate in Transfer contracts first + OKs

See if my patent for cleaning
Incorporated clip for
Battery was ever allowed
Cathode used.

Dean of Prov
Prints cited

Use

Try MgO on liquor
from Centrifuges
& get Dally
notes to at —.

Quinone is a powerful
Oxidizing agent like the
peroxides —
its power of Crystallization
is scarcely equaled by
any other substance —
Dis in boiling H_2O —

After blowing at
a test cage full
up at angle turn
Reg 2ch size of
flows in open
if so blow more

It may be - Vac Creeps
in Oven to Edges - if -
so More fan dishes
necessary to blow
bottom clothes -
possibly necessary
in [illegible]
worry to mean

Cracks may be due to
over condensation at
Edges & under in Center
from too much circulation
& when in ovens
the center is still
too condensed too
compared to outer
must blow bottom -
[illegible]

See if any P-Nitrandin
in hot days comes out
if it looks less than ours
& no P-phenylenediamine comes
over try some a
turn it into P-p diamine

Mentioned to Let
me see Sales Volume
Napthol - & what is
daily output.

Flour some returned
Check records ~~[illegible]~~
bake 210 - & print

Bachman ~~Experiments~~ ~~Cooking~~
Receipts

See if sludge and
gravel on Rye

1 = 10% Lamp Black + Shellac
2 Experiment Works Perfectly
3 Var #1000 Lamp 3 coats
healing after each,
4 Var # 1000 over & edges as well
5 2 Coat #1000, 700 lbs
6 " " 500 lbs
7 " " 700 for 6 min
8 " " 700 3 min
9 700 20 min
10 = #1000, with 1000 lbs rubber pressure
11 " " 700 lbs big press
12 " 2 Coats 700 lbs - Contact needle off in 5 minutes with Steam on - then 12 min at 700 lbs -

1510 blank 800 Rubber

~~12 " 700~~ lbs infrared powder press
12 " 800
12 " 600
12 " 500 if ok to handle
12 " 400
12 1200
12 Highest at 1000 longer heat

Bachman What-
became that Bachman
who was working on
clarling battery

See how small a battery
will act as Carry
over for light from
Magneto on a
Ford Car

Reason = Sulfonals at Lowest
Prices, The Cloud Timing was
Completely to Market Prices
[illegible]

Saw waste Acid from
Nitrobenzol Condensers
Expelled — Skeroon
Lowering Lime —

Yarrow & Co Carts a
Roll Drawing Reason
& Repair 12 or 14
1 Round

Tennant Sons & Co 16 John
Quote 12c Lb
NITRITE SODA

Trying nursing on our Iron
Various of of Lampblacks To
Keep from Coalbinding
with Water without spoiling Lampblacks
Also Some Mott or some
Recorder that in time will
hydrate & swell.

Also try ignited Anthracite 200
Mesh. also Red Iron dif precipitate

Daily Report 1519 1522
Blanks made

Daily Rept 1 Records
made - 1522 Blank Moulds made

Varnishing Machine made
& Operated day & Night
+ Number Varnished

[115]

find number of Racks 13
we have

Try Experiment of tins on
Rym 4 Rounds Brut 13
1522 on them fred Otto machine

16000 blanks / 90 single
Coats in 10 hours per
rack = requires 177 Racks
hence 3 Coat requires
3 times as many
or 531, without night
work - get ¼ 10¢ hours

Buff some discards see
how bright we can get
them - we got bright buff 1 Round
of Mandels
for [illegible]
Surface of [illegible]
[illegible]
& [illegible]

Before taking Mould
apart tap Edges slightly
so stress wave runs
through before lifting out 13
to stop peel outs
tap 4 points

9 wounds of knocking parts
out breaks side walls

Have 2 day 2 night
men to do just as Sphaat
turn down Records
Rounds all the time just
as they are sent + promission

Get a glazing block for
Metal Mold Coat
orders in Label
rejections -

Dip Edges by rotating
after mending goods
in Kerosene to soak thru
Shellac + last moulds

dabbed it like
Vaseline

Try Last Coat without Lampblack ~~[illegible]~~ of it dont stop sticking to Mould —

or More Lampblack say 7% —

Try 5% finest flake graphite instead of Lampblack —

ditto 8½ 6/4 + 5% Lampblack

Try Chlorates & perchlorates in batting —

2

See about dating used Records — Prof. Sherman

Why are gauge Cabinets not in place Floor 5 Thomas Wks. Screw Dept.

See Emery about acids — New Records

1st Store place for transfer holders & plates,

2nd Remove & store transfer plate fitter

3rd Rig up to use transfer pieces for records

4 = Experiment on Edging Records on Moulded Edges

5 = Extra Vac at position 3 with new 1 £22/3 6" rubber 5 Rounds — 4 Rounds

6 = Expert Water p/ln of & Varnish Edges.

7 = Slope Chipping out Edge powder blanks -

8. See about Magnet stop steel possibly must press another magnet fall 3 ft thru mag & Cylinder another 3 ft thru another mag -

9 = put man picking steel out & percent 8 Rounds of fine work -

10 Keep moors on the swelled spots on blanks -

11 = Dimoldle Experiment Rubber principle of pitching and Varnish —

12 Care of Graphite in Vault for 1 months work -

13 = Specially defined 1522B Powder Very much finer to Print 2nd Machining, 1 Cont 9, then water proof

14 = Water new Rubber (pad) 6" x ¾ to see if it stops Breaking Edges a Good Runner

15 = Edge + Number edges 4 Rounds, 4 to inspect

16 = See if Cam stick printed paper number on Edges -

17. Load 9 + 10 - Mould inspector watch & report defects a continue running till must be Taken off -

18 = Experiment two 8" edges Bogardus tape hardened with Weight to hold down for Lamp black, Closed to prevent Evaporation Oil to designer

19 = Water new Loader of powder showing thin -

20 = See Emery about supply of ~~powder~~ Chalk

21 = Have ice available shaking 180 Mesh screen for finenessa of powder

22 Have we a best spare parts for fuller Mill -

23 Place to store Hammer Leaders & replace by more new in lag to increase Capacity of Lags

24 = Devices for proper handling of blanks - presently new blank should be handled as Records are handled as surface sensitive —

25 = Introduce 25 High Ten Vari Bakers & test rounds to see if OK

26 - Look down Records in Water side of Rolls in Music

27 = Make wear tests on bands till 500 times Then 1 grief to test will do & 1/4 of each sufficient.

28 = Make Cold test = Christiansen type also 1 Cent in oven 180° during test before & test surface after at 6 & 6 to 62 Immerse in brine 18 deg below freezing or lower

29 = Put out on roof 6 Edged & water proofed Vulcanized Record for time test,

30. Test the records ~~over~~ Ovens & all time test records —

31= gauge for chip out in blank 3/32 in —

32 take off inspection limit on the checker & deference of Calliper between faces only inspect for injurious dent dents & steel

33= Test regular schedule
4 Rounds 6 min cool
4 Rounds 5 " "
4 " 4 " "

34 - Reg Schedule 850° for ~~10 min~~ 7 min cool
4 Rounds ~~8 min at 850 - Cool 7 min~~ 4 rounds
4 Rounds 6 min at 850
7 min Cool —

4 Rounds 15 min at 850
7 min Cool —

35 4 Rounds Rubber Forming 6" X 16 - tapered 1/2 inch wide —

36 - get Edging Wheel & assemble same. Prepare for Edges & inspect for scratching

37= Stop Energy from Condensing by 6/4 — Formaldehyde and Alcohol Key for transfer Water —

38= Make same 1 min Vis Varnish for 8 Rounds no para or Sandrac — make Ear & wear tests

39= ditto 8 Rounds with Para, no Sandrac, make Ear & wear tests.

(75)

40 – See Maximum Storage of Dye Records with Hay

41 – Powder blank for cylinder Varnished & painted hot air pressure or plunger Experiment for Dimethylaline get rid of Celluloid –

42 Take up suggest of sheathing Hoffmans Dept & Record Black room inside with steel sheet Ceiling put in of of impossible steel on wooden members of times & Sprinkler System in bath, – Steel windows in bath – fire partition in bath,

43 – More dropping tests –

44 – New added 6" x 1/32 & 6 x 1/16 & Extra Varnish position 3 – 8 Rounds –

45 = Wash face with Alcohol clear of surface hurt –

46 = Now add one more tried & Mended. to test rounds –

47 = Get up complete list & style of daily forms for reports.

48 = Put on the thermometers

See Sample of Chalk from Arkansas

Hoffman to use 200 mesh for Cameo – see set machinery at Keller shaking

1 = Riley about getting a good salesman for Cantharis in Cans

2 = Meadowcroft Cost of 1 2 5 15 25 lbs cans for Cantharis —

3 = Redstill. our Mystiane see if get it high priority & offer this also

4 = Meadowcroft — last week 300 cans lbs Cantharis Exported to France called at 1.00 = Find who buys for France — Your remember that from who wrote us from Para also the Italian & French & Swiss who wanted Cantharis

5 Stevens - Wyphen about selling Carbolic acid

6 Mendecroff last week there were exported from N.Y. to Uruguay 60 000 lbs Sodium Sulfite 10c billed also to Cuba 33207 lbs -

7 Emery I see that Allenhof last week exported to France 168 000 qrs. Value 67535, Mexico lead price -

Hoffman speak about, Patrick process + Lister man - etc -

Keep trade Ch. Machine going + record Dent down - One load of moulds

put in the Hooked pair

Hoffman get process on grinding Fine Machine if reasonable get it.

Look out for cleaning blanks + dust on V or blank table to Moore + Kirchner - + Man on other machine I will inspect otto after bake by Micro -

See Moore about Hoffman Stallion Stirling Lodge also level up top plunger before going to press

~~Miller got Round of old Regs all ready to go to Bucktown - want to see what they are passing~~

~~Emery - send for samples dif grades of Carbon Black, bright low prices~~

~~Make wear test on Diamond field dust & run on smooth part of new record & see if does that - move it as soon as it cuts - Run till it shows that 5 or 2 weeks~~

When ~~their Power~~ new record goes out slip should be used bell public clean only with rag using only Alcohol try Experiments 1st -

One round blacks 1/2 wet with alcohol other not (70) then Varnished & Run through

1 Round wet with alcohol 1/2 in all around run & then Var all over another like old dose Varnish on inside To wether 1/2 then put on very little al -

Baldwin — only
date new 1932-B
Records —

		Specification
Edison Shop N.Y.		8.058.00 —
" "	80	1705.00
" " Newark		4318.00 —

Notify Kinsler that the Vanderbuys do not take care through forward on the work or they spoil the tools & [illegible] so great. There is not quite enough [illegible] work on the [illegible] from the [illegible]

Have 1 Vanderbuys change & Rimmer 10 Records

Speak to Constables about the travelling Repair men about selling Washers level so weight don't run over to sides on smooth part —

~~Recording steam gauge in Boiler Room for Disc Dept —~~

~~Emery & Hafer wire refill to sell Formaldehyde + 6/4 —~~

(35)

Hydroquinone 200 [illegible] lbs year

Benzene 512 lbs day Aniline
180 lbs " Ether
[illegible] " 66° Benzene
1900 " MnO_2
1700 " Iron borings

Metal 100 000 lbs year

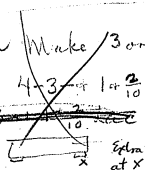
1220 lbs Phenol daily
450 lbs Chloroacetic acid
200 " Benzaldehyde Alcohol
Some Nitrite Soda & HCl
Perhaps phenol ~~to make~~ 1st.

Material 20000 Blanks
15220 daily

	Old blank	1522 blank
Tilac	2262	2467
Neat alcohol	1000 gals	339 gals
Para	40 lbs	14 lbs
Wood flour	16000 lbs	10000 lbs
Lampblack	324 lbs	368 lbs
Phenol	2211 lbs	357 lbs
Urotrop	16 lbs	1 1/2 lbs
6/4	125 lbs	14 lbs
Hexamine	20	
Formaldehyde	1273 lbs	210 lbs
Chalk		7413 lbs

Saving is about $1000 per 20 cycles

Hoffman Makes 3 on 400
Blanks 4-3 or 1 or 2/10 th Lac



Extra Rubber ring at X get thinner edge

Dip 1/2 doz sheep records in 1" water at 2 edge 1/5 of edge 2 hours & test surface

Test the old time test records in for surface etc -

Hand - Bout spare line on Ledger so as to be sure to water proof -

Press why only the round holders & not dry instead of the

See Moore if we should counterfeit blanks before travelling - also about a lock to prevent round holding from turning

Try Reg blank on hot plate, also on hot press plate to - see how much it softens etc - also if Rollen when ~~[illegible]~~ full steam on -

Another Coat now Naturally pat,

Hud Have you organized the Inspection for surface -

Take 6 or 7 Turned Cylinders
Technique pick out 2 rough
Grade & 2 good surfaces —
Test a lot of these records
to see if rough ones always have
a smooth one, always smooth
this tells of the blank &
Record —

Let [illegible] No Para

Let powder leave
Lump black out.

of Various Experts.
with Decorator
Save 100-Speech
for future Experts before
destroying powder

Put somebody work on
Regenerating Old Records
to get pulp or Shellac
back —

Find about Tube PO —

Get Enamelled Cat Hair
Can dried from
Make Cockatiel —

[illegible] for
Blank [illegible]

Don't Hold Vacancy
down so long —

Italian send reports of
Surface more often

Baldwin are you dating
Records

[illegible]

Try 4% Lengthen bar
3 in
also greater Viscosity —
3 stages mang or pulling
on strokes — reduce
Spline packe less
Viscosity — Walls
stick

Shallow Vat [illegible] day
[illegible] at 175°
Heat Vat [illegible]

[illegible] of Compound
3 fibre 4 chek
1 3/10 Lac — break
Leaks [illegible]
10 min

Heard letter near
that seconds of new
moulds —

Load new Moulds
for following surface
& for two leaks —

Reg Rao Det extra
amount around Edge
of Vat

Lost [illegible] by Water
Irrigation for got
ditto [illegible] gross
[illegible] of June

~~Hoffman Dunordie about transfer one day, supposed from~~

Test 12 old 12
new records same
records — of
Dimfaza

Charles — of Wetherop
Ni[illegible] which longed
with Lord and that
mean he is a low
ignorant British Kind
of [illegible]

Ceres Blue = paid 2 25 lb
now 5 75 now to Ehrhard
for Dyang[illegible] Recent

Merchant Jewellers Tires
etc we should insist
on monthly payments

Daily to make a lot of
small fusions using
Zinc Dust in fusion —
also Another Expert
Condense the Vapour
which come from fusion
see what they are

Also dry the Benzol[illegible]
dead dry — get the Sodi
= 3 lb 4 put deep pan
add the Sodi all at
once stir for 2 minutes
& dump work out to prevent
explosion of the phenol

If Benzenesulfonic Acid is dropped
20% Caustic Soda, then probably
at ~~[illegible]~~ 4 mole, phenol will
be found - + Na of Cathode
Result will be Na phenolate
+ precipitation of Na Sulfite
Try it —

Test waste liquor + treat
sulfite with Ferric Chl
of Violet Hue - Salicylic
acid,

Mix the sulfite and also
waste liquor & see what get

Test waste liquor 20% to
dry also sulfite treat
dry using formaldehyde
+ heat - to get phenolic
resins to polymerize
[illegible]

See Lohr + Clancy + fix
accuracy of records —

See Hand + Dunwiddie in re
throwing out ~~Mathieu~~ Submarine
Establish a system

Ask Hand why the Vol Hilo
was ever put on board when
it was originally s.o. bad —

Hand in addition to Daily
Calliper of Records —
Calliper 25 blanks
Taken generally to
Check Hoffman

See Hoffman why
he blanks Calliper and
highly Dunwiddie —

Also about the Pier work
Scheme - if ~~ok~~ see Hand
about it —

Get from Heumbert Carl's
Phenol #1 & 2 plants —

Process for phenol —
pass benzol thru hot cobalt
perox with + with NaOH —
also dump Na_2O_3 hydroxide
block by heat with workhead
NaOH, should oxidize the
benzol to phenol

Daily — Pour out some
phenolate from fusion —
weigh out 1.16 dry in
cold water — 1.16 —
boiling water — see
which gives most
phenol —

Drop test 1/2 Reg
Record —

#1 Cover 44.45
#2 " 41.85
with new dryers —

See if there is any decinate
(Rosin) soap in alcohol —
for blanks.

See if SO_2 will be
absorbed by Carb lime
from Causticizing
Soda —

Speak Mason in re
Check from Soda
Causticizing

Sea of Caustic Lime
& Malwell fuse together
4 qrs phenolates &
or lime alone in briquettes

Mawbert - Medlar Dropt
5 hoobeepan 900 holes
1 months [illegible]
How about other holes costs

Charlesy - great expedition
Cabinet from the
South

Charles E. Ohynat
Keep present bldg &
Extend 1st L of big bldg
2 stories upheretl
aside track

Calyhydrin for thermal
fissing
Dried Slaked lime
powdered Caustic Lime -
Chalk
Copper hydroxide
Nickel oxide
Sulfide Soda
Sulphur
Ferrous hydroxide Dry
Ferric "
Ferric Chloride
Mirabile Salts
Lead peroxide
Manganese peroxide -
Any Chocolate Parody
1 to 2% of Ends to Halftt.

Various Proportions.

note times & surface of
immersed (2) moulds

(cu)

find a good surface record
with Tiny rough start for
Prabott to buff the start,

get the separator varnished
records from Wrecker
also have him ~~[illegible]~~
find a separator 2 Rounds
more for my inspection

Moore = better have
hydraulic pressure on
both Block & Bent
pressure inspected
+ tested daily —
Records getting wonder

L (H), see if you can
sublime the iohete
Mercurial Daily
Installed from phenol
Still needed —

Also detail some more

also blow some over
with steam —

See How Mason get along
with Stein Hordt Co
Returned Phenol —

#2 Carbolic may have to
redistill phenol from
Mason — he has 2 stills —

Ask Kanouking how
much phenol he gets
per lb of Benzosulphonic
Acid

We have 4.6% of hydrocarbon in the residue of pilot still, #2 plant

Take W with liquor from Neutralizing & Evap to dry & use this dry residue in a new fusion in place of Benzine sulfonate Na. See if it will Benzolated before & after evaporating to dry — Benzinesulfonic Na may escape in 1st fusion —

Friday — get discard mould — polish & then try pitching on Reg blocks & taking off to see if radial scratches will be made & also if radial marks or flattening of the first 1/2 of fusion takes place

Have a turned wax block grafted & pulled off when 1/2 of wax thick to see if we now get holes like we once did.

Also with the mould we get polished put some pieces of varnish on — dry, & let get feathers & brush & see if they do seep & then look for pores by eye & lens —

Don't chips come from pitching pin in hole,

See if scratches made in square Edged Mould have bad starts & radial marks —

Very seldom see chattermarks in working Mould scratches may be caused —

Eugene

Can't be the record in taking it out of Mould Scratches it, Try it 150 times after polishing Fred G. -

Kirchen gives me a second granular just before polishing + just after -

One load dished 6 Cranks 1/2 Convex down 1/2 Convex up - print + see which records are Convex + Concave -

One Curious thing is fine 1/4 to 1/2" of lines. The second seems to all be chased up + disturbed + matte whereas 1 1/2" in in The grooves are smooth There is independent of the Scratch marks - has same appearance on overall part of many records looks like

more graphite out about abouning the Chatter marks - The wire brush gave the same appearance to the metal master, + It look as if the Ends of Grafoling brush was hitting the Celluloid -

Investigate. - see how it is done -

How would it do to polish Celluloid after printing + before grafoiting - ? ?

Note that it may be done in polishing of v.o they will Shaco Coagrad Matte on outer than inner smooth point, get some of celluloid that rejected + not grafoiled to see if in -

Grafoite a celluloid print by rub by hand + see if we get the matte

Substitute if he profiles same as he did long ago with silk — see how he does it.

Find out from Emory about or shellac in storage of different lots & Can we get a mixture of all shipments from W. and house also wood pulp —

Can get Gal. sample of Phenol from Hoffman & Andrews see if Can get it right M.P. & Color & Crystals.

Can decrease phenol in Water Containing NaCl or Electrolyte Study get Trichlorophenol — none

Do we use the same Cloth we always used with the Celluloid 2 pieces — ? ? to cloth supplier

Look at some of Harper Celluloid parts under Microscope — note if 1st & "mallow trade marks —

Hoffman let the Mallow Van soak longer into Wood pulp before drying —

Mould ½ log Exclusively with Chisel see if rolls with Water drills Entirely with wood fibre

Print as soon as made 6 rounds of blanks to see if old blanks get hard by absorbing Water — also put 6 rounds fresh box in oven at for 6 days so we dont accumulate — both same now

Keep at Simpson till we
Salt the dished blank
by —

Get 1/2 dozen blanks flat &
Steam one side — (10) 3 hard
sides & 3 soft sides, & see if
it dishes them & how —
If steam rig brush with
water —

See if the 10 cent reward has
swollen — No

Test the old & 2 months old seconds

It's probable if we use fresh
blanks or blanks preserved from
almost wont have so many
pull outs —

Inform about repair man Tools

When we were getting good
blanks, no pull outs &
little dishing & Very
Easy Edged — The outside
Edges were soft now they
are hard as almost by
Ohms & by Tolping —
Its due to changes in
Loading — We take
them, roller by calloming
Loading & see further on

Moores Expert
Cooled 6 min
at start Calliper of dishing 045
after 18 hours 026
Cool 10 min.
Calliper start 033
after 18 hours 055

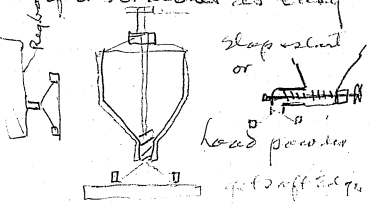
OVR

The tops is always dished or Concave no matter how you hay them — Weights on dont help Only way is to Cool all platens equally ~~to~~ which is not the case now medalle is warm — Must be alone Cold or they will dish badly —

Think rims of our blocks too hard should load in Center — as now dished by hand then Edge group & not so much pull outs make 4 Rounds Loaded in Center by a 12 point 4 Squared bag or Spreader

See that Inspection of Records Tyz-Mahon & final is done days

Oxidize face of a Copper Matrix by heating it in Muffle till black & see if it scratches as easy



Get some polished Copper Wires expose to heat & Phosphorus, Tellurium, Iodine, Bromine, Arsenic

Blush by plating on Zn Cd & heat to amalgamate.

Devise a soft positioner on platens for moulds so they dont hit hard — a spring or something like that.

It is impossible pulling on blank should make scratches .039 ~~[illegible]~~ .045 while it is possible in taking off Ring and possibly design for lifting off top mould is advisable

Look out for water + bubble marks before Vaporizing as this is almost equal to make Drops — Try & work them both before & after with Water & spittle

Press a ~~Chalk~~ alone blank a ~~Chalk~~ & ~~Press~~ & see if ~~swells~~ by water

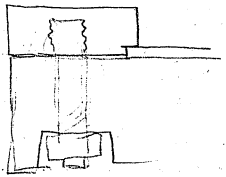
Make 400 mixing ochre & lampblack 1st & then Chalk as we did before & see results of Water test & % OK.

Watch the Record in New mould ~~[illegible]~~ scratches ~~[illegible]~~

Watch 1 Lac mould 1 to 10 as to radial scratches

Patent new mould Spr Edge ~~[illegible]~~ Dowel pins — Center holder bush & all details — 1 Revolving off blank —

Surveys Mr Weiss
for Christmas Issue –



Fred E. go around & find where
White Stuff fits in –

How Fuhr getting on
Moulding blanks & the corrects

Find Hughes back

Look Fuhr copying of
Knifes for Engraving

Simpson layout jig
for dowel pin for moulds
new rings

See Mack if he is making
new set Master of Marriage
Bells from Celluloid –

Huffman – about the
blanks entirely. Check
Print in New Mould –
also Steel for Writers

Why not use 1/2 1238 &
old powder print old in
new moulds & new in old
Moulds –

Still for Myrbane –

Dimmedolum

Lets keep the same formula
a week or two
Comes to week

Dilute the charge from
Cambria with water
then agitate with
Benzol — Distill off
Benzol — distill
Neutralize Tar & do
same thing —

Unpeel all tight bottom
plates for traces & dents
14 offenders plates —
Also what are they
cleaned with —

See if the No 2 Ketone will
deodorize Cellulose or Nitro
Cameras —

No 1 Ketone $1.00 gal
No 2 90c

3 blanks pkt various size
piece glass on remnant
Reprints then needs
records / note position

Old copy of old Ives put
in Newark program for
the Tailors —

Get vacuum Dimmedolum
Has the Ives Condenser
opened on — washed
with Kott —

Did not apply for Patent.

Different Model for this idea made and sold for $100 —

John H Yocum
325 Broadway NY
Newark
Letter about No 14

Z Malone patent
practically working balloon
100 & 150
& 150 & 185 the latter
is very plausible machine

Distilled from Woodlas
No acetone or water soluble
shipment — $100 qt

John Burnergeo
Woodbine Lodge
Roxbury Mass

Erioglaucine

Dry Dioxyphenols —
reduction from phenol still
with formaldehyde see
Send of Record at Washington

New Clark Neps received
4 Round 800 & 750
4 700 & 650 —
4 600 —

3600 grams 3 Liters
of final Centrifuge liquor
had about 808 grams Solid
including H_2SO_4 in it.

22.35 g/l of liquor is solid

Patent Dark Chrysoidin dyes
for the dyehouse.

Water Sprinkler for
24 Bldg roads —

Pay Helper Tester
28¢ extra hour —

Have Daily take Calch our
Sulphonated Benz +
Work it our way + Lime way
getting Benzaldehyde to Na
from Ecob — Then weight
then free + acidulate +
Benzalate + distill
Early —

Recrystalize Some
6/4 take off can
make it USP —

Emery Take up with Continental Co if they will buy our Continental Stocks at fair — I Fuller Mill would do it with broken say 20 Ton —

Emery — our alcohol [illegible] too much [illegible] Can we arrange for redistilling with [illegible] —

also get prices on steel —

Pick out bowed wooden plates bad & make 4 rounds — with flat plates — see if bowed plates is cause of low % perfect —

Redistilled phenol between definite BP — to make paraphenolphenol HCl

Erioglaucine

Trade name of the Dye stuff obtained by Condensing Benzaldehyde O Sulphonic acid with Ethylbenzylaniline sulphonic acid, See J Soc Chem Industry

Basle, English patent 25128 Grehm + Schulz = Annalen 299 - 347

See about Condensing & boiling down & costs = & why it wasnt tested for full time during until lately

See how Meta Para is made

1915 Kommunis of Gent from Oranges 5000 records
1916 - 2460 "

Formulae

100 gm P. nitroacetanilide
500 " Kerosene BP 150
250 " Iron
200 " gm 50% Barium Sulphide Lys - Heat to 130 till all reduced - filtered off Sol crystalized out Completely on cooling. Illustrates Sol can be used for coloration & dyeing

Paramedo phenols

Almost insol CO_2
Very sol in NaOH.

Hence we break NaOH
dissolve out Paramedo from
mud — then filter precip
by just neutralizing the
NaOH, or CO_2 bubbling
do this — this will
lemonade the alcohol
scheme

Try heating Amedo base
also prepare chlorobenzene
in liquid form to
high temp, + mods
Cat also

Bangor Amedo Sulfonic
+ precip by lime —
also Sulfony acid

Condensate Dressed
Cigar Corps —

~~Broad about Jam
Power Co
Chemicals Pulmo
+ Salts + Monochlor
for Chemicals —~~

1" Siren 25000 waves
seconds cycles or other

Receiver on bridge

Receiver tuned to 25000
separate
microphone

[illegible] obstacle – Mr Echo
return waves [illegible]
listening there is one
[illegible]

Probably long of
return waves to
sufficient to continue
bridge –

2 Rounds ~~Beveled~~
blanks only Varnish
flat proof.

Also by [illegible] with
sheathing to keep it
flap –

Try fishes & [illegible]
water [illegible] of animals
[illegible] [illegible] animal
membrane –

Norwell Lab.

Acreage —

100 acres —

Original Estimate $[illegible] acre

Sept 21 1916 —

Thank Sul Acid & Sulphate lost Crushers in solid state Crushed in rolls & just dampened. Try it

No

In leaching with alcohol use several Cans treated, The fresh solution is added to the Can nearest free of tannic or Para & this to next one less free & so on, then the last will always be exhausted

Precipitate MnO_2 with just enough $MnSO_4$ then dry & ignite. Make small test cell with the manganese & hold until stronger $MnSO_4$ make test cell 400 on test & white or MnO_2

Tuesday Sept 26 Sulphate agent that is prepared at company, or that is used in $MnSO_4$ & SO_2 in charge lab —

Dehydrate $MnSO_4$ by heat & strong H_2SO_4. Then find a way of hydrolizing it for Carbon in Sulphuric acid —

It is important to get all the Ammonia out of Amredo & otherwise spoils stock

Note we find

Trimethylsulphonium hydroxide
$(CH_3)_3S \cdot OH$ – it acts as Potash
without decomp. – Strong Bases
are strong as potash, resemble
Later so closely that it absorbs
CO_2. Carbonyl Chloride
Drives out Ammonia & gives
Salt with acids even with
Triphenylsulphide, these
[illegible]
& the Bromides & Sulphides

5.0 – 150 – 350
Examined –
Sinnatt Elgrea

Marchant
[illegible] – Chal
100 [illegible] Ylcomed
Tuesday –

[illegible]
Thompson

about [illegible]
(Baker) – if [illegible]
himself with another Phenol

Saved Amido Boric, Treat
with CO_2 & then get out the
salt as Yellowish Amorp. sol
Urea Base, also try Phosphor.
Boric & other Lotak bases to
get a very sol Price Salt &
neutral Lime sort –

(1135)

Use of the Ag anode reduced in chlorate Sol with NaOH + Zinc — to remove —

Make Coll. fn which 1/3 is iron compounds to Ni + Ni Compounds to Iron

~~So what concerns it specs my people~~

Now Friendly + find out what Bromwith really does —

~~Prepare~~ NiOH, with 10% of other hydroxides —

Also a large number of Experiments to get NiOH, in different physical condition, little Fe

Also on a fully Cobalt P+N + work up $Co(OH)_2$ physical condition

~~Bottle Cl, Acid on Iron + overcharge Iron Iron O~~

Mn H on reversing —

Demonstrate —

Why not break Vac so air blows Iron Condenser into Bogey + not Mercury —

Demonstrate

Buy 2 breakfast on Regulator

Feldspar, 13 at 150 — 1950
Salt 120 lbs 20 slow — 2400
Coal 720 low 5 Tons 3. — 1500
— 5850

Electric added
Makes. Salt + Coal
Most important.
Values we also consider power for grinding —

13
150
65
13
195

13
60
780

750
13
225
750
975
Wood | 800
175

150 | 2300 — 3e
1150 — 6—
395

7 | 5540 — 800 gals.
79 — 1400
1070
327

6 | 525 — 5 | 7000 — 7 | 7500
87 — 1400 — 1070

210 | 450 — 220

150 — 23
60 — 100
210 — 210 | 2300 | 1200 | 300

6 Cubicaccu
87
147

1,50
13
450
150
195

1950
3409
6825

1250
22
2750
2750

264
13
792
264
343

150 | 2000 | 13
150
500

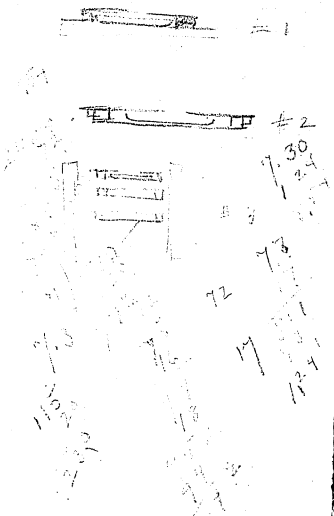
14 lots

975
3
2925

1950
2900
3409
8259

C147J

Plowed 52½ acres —



Kammerhoff agreement.
July 22 1913

4000 lbs day production Cost
27 cents (40 cents) for 100
beyond 1 cent lb for increased
production above 4000 lbs daily
4 1/4 of reduction below 27 cents

P 4600

1350

2

4600

910 — 5000 / 40 / 200000 / 8

8 | 33 tons

2 | 1.7 cents

8 | 2000 / 250 —

885 / 8

7,080

36 —

16000 / 200 lbs

8000
6000
2000

8.4
645
448
529 | 33
48
49
48

Nanaimo

529 | 48000 / 5703 / 2975 / 224 / 32 | 75.6

3.46

2
84
48
29
184

1000 —

65 —

1000 — 45 — 3 — 48 — 480
350 — 30 — 3 — 33 — 115
650 — 30 — 30 — 195
200 — 68 — 68 — 1156
1500 — 68 — 68

3700

3700 | 194600 | 52
185 00
9600
7400
2200

1700
68
1360
10200
1156

650
30
195

350
33
105
105
115

650 — 30 — 195